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ABSTRACT OF THE DISCLOSURE

In accordance with the present invention, viral proteins that are responsible for membrane fusion and syncytium formation induced by three different fusogenic orthoreoviruses, i.e., avian reoviruses (ARV), Nelson Bay virus (NBV), and Baboon Reovirus (BRV), have been identified. The genes encoding these proteins have been cloned and sequenced; functional analysis thereof indicates that expression of these proteins in transfected cells results in cell-cell fusion.